

# DECLARATION OF PRIORITY INTEREST TO COMPETE FOR SCHOLARSHIPS LINKED TO A SPECIFIC RESEARCH TOPIC

I, \_\_\_\_\_ (full name),

born in \_\_\_\_\_ (place) on \_\_\_\_\_ (date)

wish to express my interest in applying primarily for the following scholarships linked to a specific research topic (please tick the appropriate box and rank the research topics by order of priority).

<b>PhD Programme in “Agri-Food Science, Technology and Biotechnology”</b>			
<b>Specific research topic</b>	<b>Interest in applying for the scholarship linked to the specific research topic YES/NO</b>		<b><u>If you are interested in more than one specific research topic, please enlist the topics in order of priority:</u></b>
UMCC culture collection as a reservoir of microbial resources for sustainable bioprocesses	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>1</b> _____ _____
Combined Non-GMO Strategies to Enhance the Aromatic Potential of Lager Yeasts and Improve Beer Quality (LAGERBOOST)	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>2</b> _____ _____
The role of gut microbial metabolites of dietary phenolic compounds in human health	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>3</b> _____ _____

## PhD Programme in “Computer, Language and Data Science for Social Innovation”

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		<u>If you are interested in more than one specific research topic, please enlist the topics in order of priority:</u>
Cooperative and non-cooperative motion planning and control for edge-case autonomous driving	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>1</b> _____
Motion planning and control at and beyond the defined Operative Design Domain (ODD) in extreme autonomous driving	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>2</b> _____
Co-Scheduling of CPU, Memory, and Hardware Accelerators for Deterministic Real-Time Guarantees in Modern Computing Systems	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>3</b> _____
Low-Latency Integration of Intra-Vehicle and V2X Communication Protocols for Cooperative and Autonomous Driving	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>4</b> _____
Latency-Aware Orchestration of Multimodal Applications in Intelligent Living Labs for Smart Mobility	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Syntax out of Africa: Deep History through Human Grammars (DHisGram)	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>5</b> _____
Multimodal Generative Digital Twins for Personalized Education: Heterogeneous Encoders and Adaptive Content Creation	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Machine-learning-based object detection, tracking, and motion forecasting for extreme autonomous driving	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____

**PhD Programme in “Health innovative products and technologies (HIP-TECH)”**

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		<u>If you are interested in more than one specific research topic, please enlist the topics in order of priority:</u>
In silico design and optimization of dual KRas-G12C/ADAM17 inhibitors for the treatment of resistant Non-Small Cell Lung Cancer.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>1</b> _____ _____
Synthesis and optimization of dual KRas-G12C/ADAM17 inhibitors for the treatment of resistant Non-Small Cell Lung Cancer.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>2</b> _____ _____
Biological evaluation and optimization of dual KRas-G12C/ADAM17 inhibitors for the treatment of resistant Non-Small Cell Lung Cancer.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>3</b> _____ _____
Preclinical development and characterization of drug delivery platforms using a technology-driven and industrial readiness approach	<input type="checkbox"/> YES	<input type="checkbox"/> NO	

## PhD Programme in “Information and communication technologies (ICT)”

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		<u>If you are interested in more than one specific research topic, please enlist the topics in order of priority:</u>
Large-Scale and Trustworthy Multimodal Foundation Models	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>1</b> _____
AI modularity for foundational models	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Multimodal Reasoning and Understanding for Technical Diagrams and Complex Documents	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>2</b> _____
Modularity and task arithmetic in Multimodal vision AI systems	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>3</b> _____
Analysis of multidimensional and heterogeneous data, integrated with local language models for advanced operational support systems in industrial contexts	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Modular AI and world models for simulation and control	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>4</b> _____
Modular and Adaptive Multimodal Foundation Models	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Federated Learning in the Pervasive Computing Continuum	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>5</b> _____
Advanced Multi-Interface 5G Standalone Networks for V2X Communications and Experimental Vehicular Applications	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Experimental Characterization of Advanced Soft and Hard Magnetic Materials for Traction Electrical Machines	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Modular and task arithmetic for foundation models on multi sensory and multi source data	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____

## PhD Programme in “Industrial Innovation Engineering”

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		<u>If you are interested in more than one specific research topic, please enlist the topics in order of priority:</u>
Modeling and control of multi-robot systems	<input type="checkbox"/> YES	<input type="checkbox"/> NO	1 _____
Mitigation of carbon dioxide emissions through capture at bioenergy plants and its application in hard-to-decarbonize industrial sectors	<input type="checkbox"/> YES	<input type="checkbox"/> NO	2 _____
Modeling and simulation of innovative materials and next-generation semiconductor devices, and the study of their reliability	<input type="checkbox"/> YES	<input type="checkbox"/> NO	3 _____
Technologies to Define a Pathway to a Carbon-Neutral Ceramic Industry	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____

## PhD Programme in “Mechanical and Vehicle Engineering”

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO	
Thermo-fluid dynamic analysis of high-performance engines and their components	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## PhD Programme in “Models and Methods for Material and Environmental Sciences”

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		<u>If you are interested in more than one specific research topic, please enlist the topics in order of priority:</u>
Optimization of electrolytes for lithium metal-based solid-state batteries	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>1</b> _____
New current collectors for lithium metal-based solid-state batteries	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>2</b> _____
In operando analysis of electrolyte degradation in lithium metal batteries	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>3</b> _____
Advanced Characterization of Li and Na-ion based battery materials using Electron Microscopy	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Rational Design of Macrocyclic and Acyclic Chelators for Scandium-44 and Titanium-45 toward Radiopharmaceutical Applications	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____

## PhD Programme in “Molecular and Regenerative Medicine”

Specific research topic		Interest in applying for the scholarship linked to the specific research topic YES/NO	
<b>Selection 2</b>	Characterization of the transcription factors driving anti-tumor immunity (Topic 1)	<input type="checkbox"/> YES	<input type="checkbox"/> NO
	Study of the biological determinants in B-cell lymphomas (Topic 2)	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>Selection 3</b>	Engineering the interaction between hematopoietic stem cells and their niche for ex vivo gene therapy approaches (Topic 1)	<input type="checkbox"/> YES	<input type="checkbox"/> NO
	In vivo gene therapy approaches for multisystemic diseases (Topic 2)	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## PhD Programme in “Neurosciences”

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		<u>If you are interested in more than one specific research topic, please enlist the topics in order of priority:</u>
Early recognition of psychological distress and biopsychosocial complexity in the clinical oncology setting	<input type="checkbox"/> YES	<input type="checkbox"/> NO	1 _____ _____
Neuropsychological and Behavioral Phenotyping in Alzheimer’s Disease and Cerebral Amyloid Angiopathy: integrating clinical neuroscience, imaging, and point-of-care biomarker innovation	<input type="checkbox"/> YES	<input type="checkbox"/> NO	2 _____ _____
Development of CBT interventions for patients with Central Nervous System hypersomnia	<input type="checkbox"/> YES	<input type="checkbox"/> NO	3 _____ _____
Clinical, kinematic, neurophysiological, and advanced neuroimaging study of paroxysmal eyelid movements in a large cohort of patients with genetic generalized epilepsy	<input type="checkbox"/> YES	<input type="checkbox"/> NO	

## PhD Programme in “Physics and Nano Sciences”

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		<u>If you are interested in more than one specific research topic, please list the topics in order of priority:</u>
Electrolyte-gated organic transistors as sensors of biomarkers of Alzheimer’s disease	<input type="checkbox"/> YES	<input type="checkbox"/> NO	1 _____ _____
Controlling nucleation and growth of beta-amyloid isoforms on electrode surfaces of electrolyte-gated organic transistors	<input type="checkbox"/> YES	<input type="checkbox"/> NO	2 _____ _____
BlackHoleWeather: Multiscale Black-Hole Astrophysics and Galaxy Evolution	<input type="checkbox"/> YES	<input type="checkbox"/> NO	3 _____ _____
Computational Design and Characterization of Silver-Based Contact Materials for Switching Arc Applications	<input type="checkbox"/> YES	<input type="checkbox"/> NO	

## PhD Programme in “Reggio Childhood Studies”

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO	
INSPIRE PROJECT: AI in educational processes	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Visual literacy	<input type="checkbox"/> YES	<input type="checkbox"/> NO

The option hereby chosen has priority over regular places, with or without scholarship.

Date and place, \_\_\_\_\_

Signature

\_\_\_\_\_